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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,905	10/20/2004	Nektarios Georgalas	36-1862	5057
23117 7590 04/28/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
DEWS, BROOKE J				
ART UNIT		PAPER NUMBER		
2181				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/511,905

**Applicant(s)**

GEORGALAS ET AL.

**Examiner**

Brooke J. Dews

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. In view of applicant's amendment filed 02/02/2009, application is still pending.

Applicant's arguments have been fully considered but they are not persuasive. Therefore a **FINAL REJECTION** is administered based on the disclosures of Thomas Joseph Prorock (US Patent 6754704), Cheryl L. Neofytides et al. (US Patent 7398252), Nektarios Georgalas (A Framework that uses Repositories for Information Systems and Knowledge Integration), and Nektarios Georgalas (US Patent 7019740).

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 7, 9-11, 15, 16, 19-23 are rejected under 35 U.S.C. 102(e) as being taught by Thomas Joseph Prorock (US Patent 6754704), hereafter Prorock.

**Regarding claims 1, 19, 21, and 23** Prorock discloses a method of operating a computer system to provide a user interface to a heterogeneous distributed database (**via heterogeneous network; Column 7 lines 6-12**) including a plurality of databases of a different format (**via different data processing systems which include memory containing an item record database module; Column 5 lines 35-50**), said computer system including a rule store (**memory 64**) storing one or

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more rules, said method comprising the steps:

providing a user interface (via I/O data ports 58) to said rule store (memory 64) enabling user configuration of said rule store with one or more rules (wherein program code is equivalent to rules), each rule identifying a handler program (wherein categories of software and data are equivalent to handler programs), said handler program (categories) being associated with one or more user requirements (via retail POS) and being operable to interact with said heterogeneous distributed database (data processing system) in accordance with said user requirements; (Column 5 lines 15-21, 35-53, 63-67 and Column 6 lines 4-26)

receiving a request (via customer transaction) detailing one or more user requirements (via retail POS); (Paragraph [0027])

responsive to receipt of said request:

a) selecting a handler program (category of software) by searching said rule store (memory 64) for a rule associating said one or more user requirements of said received request with a handler program; (Column 12 lines 16-20 and 31-37)

b) running (executing) said selected handler program (via operating system 68) to interact with one of said plurality of databases (data processing system). (Column 5 lines 43-45)

Claims 2 and 3 are rejected for the reasons set forth hereinabove for claim 1, and further Prorock discloses a method, wherein said (memory 64) handler program is identified by the name and the location of the handler program and the handler program itself. (Column 5 lines 15-21, 35-53, 63-67 and Column 6 lines 4-26)

Claim 7 is rejected for the reasons set forth hereinabove for claim 1, and further Prorock discloses a method wherein said request comprises a request to store (via logging in a transaction) a handler program. (Column 5 lines 63-67)

Claim 9 is rejected for the reasons set forth hereinabove for claim 1, and further Prorock discloses a method wherein said request contains a rule associating a handler program with the user requirements of said received request. (Column 5 lines 15-21, 35-53, 63-67 and Column 6 lines 4-26)

**Claim 10** is rejected for the reasons set forth hereinabove for claim 1, and further Prorock discloses a method wherein said rules are expressed in the form of text (**via entering a code**). (Column 5 line 51-53)

**Claim 11** is rejected for the reasons set forth hereinabove for claim 10, and further Prorock discloses a method wherein said rules are preparable (**via adjusting the price to account for a sale**) using a text editor (**via command received**). (Column 5 lines 53-67)

**Claim 15** is rejected for the reasons set forth hereinabove for claim 1, and further Prorock discloses a method wherein said rule store user interface is restricted to a certain class of user (**those responsible for certain stores**). (Column 13 lines 17-24)

**Claim 16** is rejected for the reasons set forth hereinabove for claim 1, and further Prorock discloses a method wherein the data storage system user interface is available to a different set of users (**via I/O port**) from those able to modify said rules (**administrator**) in said rule store. (Column 5 lines 15-18 and Column 13 lines 17-24)

**Claim 20** is rejected for the reasons set forth hereinabove for claim 1, and further Prorock discloses a digital data carrier carrying a program of instructions executable by processing apparatus. (Column 3 line 60-Column 4 line 6)

**Claim 22** is rejected for the reasons set forth hereinabove for claim 21, and Prorock further discloses a method further comprising storing (**via memory 64**) one or more rules in said rule store. (Column 5 lines 27-34)

***Claim Rejections 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Joseph Prorock (US Patent 6754704), hereafter Prorock, as applied above in claim 1 and 7, and further in view of Cheryl L. Neofytides et al. (US Patent 7398252), hereafter Neo.

**Claims 4 and 8** are rejected for the reasons set forth where Prorock discloses claims 1 and 7, however Prorock does not explicitly disclose a method further comprising the step of running a default handler program to interact with said data storage system if no rule associating a handler program with the one or more user requirements of said received request is found.

Neo discloses a method further comprising the step of running a default handler program (**default input handler 160**) to interact with said data storage system if no rule associating a handler program with the one or more user requirements (**for transferring money**) of said received request is found. (**Column 9 lines 50-57**)

Neo and Prorock are analogous art because they are from the same field of endeavor involving involving point of sales methods and systems.

It would have been obvious to one having ordinary skill in the art to combine Neo's default handler program with Prorock's POS system. The motivation being to simplify payment distribution. (**Column 2 lines 24-32 of Neo**)

4. Claims 5, 6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Joseph Prorock (US Patent 6754704), hereafter Prorock, as applied to claim 1 above, and further in view of Nektarios Georgalas (A Framework that uses Repositories for Information Systems and Knowledge Integration), hereafter Georgalas.

**Claim 5** is rejected for the reasons set forth where Prorock discloses claim 1, however Prorock does not explicitly disclose a method, wherein said rule store user interface provision step comprises storing a rule associating predetermined user requirements with a handler program executable to interact with said rule store to introduce a further rule contained within said request into said rule store.

Georgalas discloses storing a rule associating predetermined user requirements with a handler program (Page 4 lines 13-14 and page 6 line 11-17) executable to interact with said rule store to introduce a further rule (new source) contained within said request into said rule store (Page 7 lines 1-9).

Georgalas and Prorock are analogous art because they are from the same field of endeavor involving database or file accessing.

It would have been obvious to one having ordinary skill in the art at the time of invention to combine Georgalas' rule storing with Prorock's data storage system. The motivation being provide unified access to the contents of the repository and other operational data stores, to provide smoothly integrated information systems. (Page 2 line 8-10 of Georgalas)

**Claim 6** is rejected for the reasons set forth hereinabove for claim 5, and further Georgalas discloses a method according to wherein said further rule (new source) replaces an existing rule (via rule-based queries). (Page 7 lines 10-23)

**Claim 12** is rejected for the reasons set forth where Prorock discloses claim 1, however Prorock does not explicitly disclose a method wherein said rules are indicative of a time after which said rules should no longer be applied.

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Georgalas discloses a method wherein said rules are indicative of a time after which said rules should no longer be applied (the customized components are specialized to perform application specific task, and not be re-used). (Page 4 Paragraph 4)

Georgalas and Prorock are analogous art because they are from the same field of endeavor involving database or file accessing.

It would have been obvious to one having ordinary skill in the art at the time of invention to combine Georgalas' association rule with Prorock's data storage system. The motivation being provide unified access to the contents of the repository and other operational data stores, to provide smoothly integrated information systems. (Page 2 line 8-10 of Georgalas)

5. Claims 13, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Joseph Prorock (US Patent 6754704), hereafter Prorock, as applied to claim 1 above, and further in view of Nektarios Georgalas (US Patent 7019740), hereafter Georgalas 1.

**Claim 13** is rejected for the reasons set forth hereinabove where Prorock discloses claim 1, however Prorock does not explicitly disclose wherein said data storage system comprises a plurality of databases and wherein each one of said plurality of databases has a different data handler.

Georgalas1 discloses a method wherein said data storage system (202-208 via network 210) comprises a plurality of databases (via 300, 308, 316; Figure 3A-C) and wherein each one of said plurality of databases has a different data handler (API module 306, 314, 322). (Figure 2)

Georgalas1 and Prorock are analogous art because they are from the same field of endeavor involving expanding or limiting access to and retrieve data or files, and concept retrieval are used.

It would have been obvious to one having ordinary skill in the art to use the plurality of databases in Georgalas 1 in the data storage system of Prorock. The motivation would be to allow for an expanded query functionality. (Column 3 line 65-Column 4 line 5 of Georgalas1)



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**Claim 14** is rejected for the reasons set forth hereinabove for claim 13, and Georgalas 1 further discloses a method wherein said databases are of a different format to each other (heterogeneous databases). (Column 2 line 19-25)

**Claim 17** is rejected for the reasons set forth hereinabove for claim 1, and further discloses a method wherein said computer system comprises a plurality of computers in communication with one another, the handler programs being run on a different computer to the one that receives said request.

Georgalas1 discloses a method wherein said computer system (Figure 2) comprises a plurality of computers (200-208) in communication with one another, the handler programs (API module 306, 314, 322) being run on a different computer to the one that receives said request. (Figure 3A-C)

Georgalas1 and Prorock are analogous art because they are from the same field of endeavor involving methods of expanding or limiting access to and retrieve data or files, and concept retrieval are used.

It would have been obvious to one having ordinary skill in the art to use the plurality of computers in Georgalas1 in the data storage system of Prorock. The motivation being to allow for an expanded query functionality. (Column 3 line 65-Column 4 line 5 of Georgalas1)

**Claim 18** is rejected for the reasons set forth hereinabove for claim 1, and further discloses a method wherein said computer system comprises a plurality of computers in communication with one another, the rule store being on a different computer to the one that receives said request.

Georgalas1 discloses a method wherein said computer system (Figure 2) comprises a plurality of computers (200-208) in communication with one another (via network 210), the rule store (304, 312, 320, 326) being on a different computer (202-208) to the one that receives said request (query).

Georgalas 1 and Prorock are analogous art because they are from the same field of endeavor involving where methods of expanding or limiting access to and retrieve data or files, and concept retrieval are used.

It would have been obvious to one having ordinary skill in the art to use the plurality of computers in Georgalas 1 in the data storage system of Prorock. The motivation being to allow for an expanded query functionality. (Column 3 line 65-Column 4 line 5 of Georgalas)

### *Response to Arguments*

6. Applicant's arguments are summarized as the following:

A. Examiner cannot properly ignore that the store stores rules and that it is the rules that identify a certain handler program that is then selected and run.

In response to applicant's argument, A, examiner notes that the memory holds (**stores**) categories of software and data (**handler programs**), and these categories (**that include event handler program module**) may be monitored (**identified**) to manually extract the event data. (**abstract; Column lines 15-21, 35-53, 63-67**)

B. Prorock does not select the event data collection module based on first searching the "memory 64" for a "piece of program code" that specifies this module for event data collection; it is configured to automatically select this module for the event data collection.

In response to applicant's argument, B, examiner notes that the disclosure of Prorock mentions manually extracting the event data. (**abstract**)

### *Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brooke J. Dews whose telephone number is 571-270-1013. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alford W. Kindred/  
Supervisory Patent Examiner, Art Unit  
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